

ABSTRACT

Three-dimensional models are created from one or more image panoramas. One or more image panoramas representing a visual scene and having one or more objects is received. A directional vector for each image panorama is determined, the directional vector indicating an orientation of the visual scene with respect to a reference coordinate system. The image panoramas are transformed such that the directional vectors are aligned relative to the reference coordinate system. The transformed image panoramas are aligned to each other. A three dimensional model of the visual scene is created using the reference coordinate system, the model comprising depth information describing the one or more objects contained in the scene.